



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

2118845
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FILE NO. 22-3

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2118845

SEP 22 1999

SENT VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ref: 8ENF-L

Mr. David O. Suhr, Manager
Idle Properties
Hecla Mining Company
6500 Mineral Drive
Coeur d'Alene, ID 83815-8788

Received
Office of Enforcement
SEP 23 1999
Compliance & Env. Justice

Re: Order Requiring Monitoring, Testing, Analysis and Reporting issued pursuant to Section 3013 of RCRA, 42 U.S.C. § 6934, for the Hecla Pond, Shivwits Band Paiute Reservation, Washington County, Utah

Dear Mr. Suhr:

Pursuant to Section 3013 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6934, the United States Environmental Protection Agency ("EPA") is issuing an Order Requiring Monitoring, Testing, Analysis and Reporting ("Order") to Hecla Mining Company for its waste disposal facility ("facility") (a/k/a Hecla Pond), located in Washington County, Utah, within the exterior boundaries of the Shivwits Band of Paiute Indian Reservation. This Order is based on a finding that the presence of hazardous wastes at the facility may present a substantial hazard to human health or the environment following an EPA RCRA compliance evaluation inspection and initial soil and leachate sampling and analysis conducted in and around the facility in November 1998.

The purpose of this Order is to characterize the soils and leachate associated with Hecla's facility. The Order requires that Hecla prepare a soil sampling and analysis work plan to collect and analyze representative soil samples to determine the nature and extent of any soil contamination in and around the facility. The Order further requires that Hecla prepare a leachate and run-off sampling and analysis work plan to determine the nature and extent of contaminated leachate and run-off flowing from the portions of the facility adjacent to and downstream from the Hecla Pond, including but not limited to the trenches or ditches and evaporation pond constructed to collect Hecla Pond leachate. The soil and leachate and run-off sampling plans are due within forty-five (45) days of receipt of this Order.

If you have any questions regarding this Order, the most knowledgeable EPA representatives regarding this matter are Linda Jacobson, Environmental Engineer, at 303/312-6503, and Amy

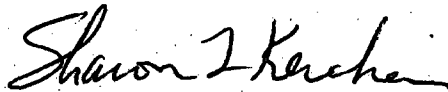


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Swanson, Enforcement Attorney, at 303/312-6906. In accordance with RCRA § 3013(3), 42 U.S.C. § 6934(c), Hecla or its representative may confer with EPA regarding this Order in person or by telephone no later than sixty (60) days after the issuance of this Order. Please contact Ms. Swanson to make conference arrangements.

We urge your prompt attention to this matter.

Sincerely,



Sharon Kercher, Director
Technical Enforcement Program
Office of Compliance, Enforcement,
and Environmental Justice

Attachments: EPA Region VIII's Field Sampling Guide
QAR5

cc w/out Attachments:

Glen Rogers, Shivwits Band of Paiute Indian Tribe
Betsy China, Paiute Indian Tribe Environmental Program
John Krause, BIA Phoenix Area
Effie Delmar, BIA Southern Paiute Field Station
Janet Wong, U.S. DOI Office of the Solicitor, Phoenix Area
Tina Aretmis, Regional Hearing Clerk



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**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII**

**FILED
EPA REGION VIII
HEARING CLERK**

IN THE MATTER OF:

**Hecla Mining Co.
6500 Mineral Drive
Coeur D'Alene, ID 83815-8788**

EPA ID No. UTD982589848

Respondent.

RCRA Docket

**PROCEEDING UNDER SECTION
3013 OF THE RESOURCE
CONSERVATION AND RECOVERY
ACT, 42 U.S.C. § 6934**

DOCKET NO.: RCRA-8-99-06

**ORDER REQUIRING MONITORING, TESTING,
ANALYSIS AND REPORTING**

I. JURISDICTION

1. This Administrative Order ("Order") is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") by Section 3013 of the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. § 6934. The authority to issue this Order has been properly delegated to the undersigned officials.
2. EPA maintains sole jurisdiction to implement and regulate the RCRA program within the exterior boundaries of the Shivwits Band of Paiute Indian Reservation.
3. This Order is issued to Hecla Mining Co. ("Hecla" or "Respondent"), a corporation organized under the laws of the State of Delaware, operating a facility within the meaning of Section 3013(a) of RCRA, 42 U.S.C. § 6934(a), on tribal trust land within the exterior boundaries of the Shivwits Band of Paiute Indian Reservation.
4. This Order is based upon the administrative record compiled by EPA and incorporated herein by reference. The record is available for review by the Respondent and the public at EPA's Regional Office at 999 18th St., Suite 500, Denver, CO 80202-2466.

II. PARTIES BOUND

5. The provisions of this Order shall apply to and be binding upon Respondent and its officers, directors, employees, agents, contractors, successors, and assigns.
6. No change in ownership, corporate, or partnership status relating to the facility described in this Order will in any way alter the status or responsibility of Respondent under this Order. Any conveyance by Respondent of title, easement, or other interest in the facility described herein, or a portion of such interest, shall not affect Respondent's obligations under this Order. Respondent shall be responsible and liable for any failure to carry out all activities required of Respondent by this Order, irrespective of its use of employees, agents, contractors, or consultants to perform any such tasks.
7. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within seven (7) calendar days of the effective date of this Order, or on the date of such retention, and Respondent shall condition all such contracts on compliance with the terms of this Order.
8. Any documents transferring ownership and/or operations of the facility described herein from Respondent to a successor-in-interest shall include written notice of this Order. In addition, Respondent shall, no less than thirty (30) days prior to transfer of ownership or operation of the facility, provide written notice of this Order to its successor-in-interest, and written notice of said transfer of ownership and/or operation to EPA.

III. FACILITY DESCRIPTION

9. Pursuant to an Amendment to Lease entered into between Hecla and the Shivwits Band of Paiute Indian Tribe on September 25, 1995, the Respondent leases and is responsible for a waste facility ("facility") described approximately as: beginning at a point N 59°30' West, 1510 feet from the Southeast Corner of Section 5, Township 42 South, Range 17 West, Salt Lake Base and Meridian, thence West, 560 feet, thence North 21°40' West, 415 feet; thence North 34°30' East, 250 feet; thence East, 526 feet; thence South 4°26'31" East, 590 feet to the point of beginning. The parcel of land lies within the SE1/4, the E1/2 SW1/4 and S1/2NE1/4, Section 5 and the NW1/4, NE1/4, Section 8, Township 42 South, Range 17 West, Salt Lake Base and Meridian, within the reservation of the Shivwits-Paiute Band Indian Tribe, within Washington County, Utah.
10. The facility is located on approximately 8.28 acres of the original site lease and principally consists of a 500-foot diameter pond ("Wastepile") and adjacent evaporation pond. The Wastepile contains an open leachate collection trench partially constructed around its southwest side that collects runoff and drains it into the evaporation pond also located on its southwest side.

11. Groundwater near the facility occurs in a confined limestone aquifer at a depth of 280 to 360 feet from the surface.
12. The groundwater has a total dissolved solids ("TDS") level in excess of 3000 mg/l which is unsuitable for potable use without treatment.
13. The facility is located on the eastern slope of the Beaver Dam Mountains in an area that drains generally to the east towards the Santa Clara River.
14. There are no streams or springs on or adjacent to the facility; the nearest surface water is the Santa Clara River, a tributary of the Virgin River, approximately 2.5 miles away.
15. Runoff from the facility and Wastepile outside of the collection trenches drains in a northeasterly direction into a catchment basin currently maintained by OMG Americas, Inc.
16. Livestock grazing and mining have comprised the two major uses of land in and around the facility. Although no grazing leases presently exist on the facility, cattle have been observed in the immediate area.
17. Cattle use the catchment basin as a stock watering pond.

IV. FINDINGS OF FACT

Ownership and Operation History:

18. Beginning in March 1984 and continuing through 1988, (March 22, 1989), the St. George Mining Company ("SGMC") constructed and operated a mill and tailings disposal facility on approximately 180 acres of tribal trust land located in Section 5 and Section 8, Township 42 South, Range 17 West, Salt Lake Base and Meridian, leased from the Shivwits Band of Paiute Indian Tribe (the "site"). The site consists of thirty (30) acres for production, seventy (70) acres for general storage and waste disposal and eighty (80) unused acres.
19. During SGMC's period of operation, SGMC produced and disposed of wastes in three asphalt-lined waste impoundments on the site, including the Wastepile (a/k/a Pond 2), and Ponds 1 and 3.
20. At the end of SGMC's operations, the waste containment system on site consisted of eight ponds containing various amounts of waste solution and solids.
21. Hecla purchased the site operation and lease from SGMC on or about March 19, 1989, for the purpose of continuing gallium and germanium extraction operations and producing zinc and silver by-product. As part of the proposed operations, Hecla planned to reprocess the

wastes historically produced and disposed of on the property and utilize the existing waste areas for additional waste disposal. The waste impoundment facilities were designed to contain both existing waste and tailings produced from Hecla's operations.

22. Hecla submitted a Part A RCRA permit application in February 1990 to treat, store, and dispose of hazardous wastes as an existing facility. On May 8, 1990, Hecla provided EPA Region VIII with a summary of the facility's acid leaching operation, wherein Hecla concluded that because the acid leaching operation at the facility constituted beneficiation, any wastes generated from this process were not hazardous waste as defined by RCRA Subtitle C regulations. Following EPA's concurrence with Hecla's conclusion, Hecla withdrew its Part A application on November 13, 1990. EPA assigned Hecla EPA hazardous waste identification number UTD982589848.
23. Hecla produced germanium concentrate and cathode copper on the site from February to August 1990.
24. Unmilled ore at the facility was placed in the Wastepile when the operation was shutdown in 1990.
25. Hecla conducted cobalt sulfate operations on the site from November 1992 until it sold the operation and lease to OMG Americas, Inc. ("OMG"), a wholly owned subsidiary of Mooney Chemicals, Inc., in October 1995.
26. Between the period November 1992 and October 1995, Hecla placed wastes from the cobalt sulfate operation into the Wastepile.
27. At the time Hecla sold the operation and lease to OMG, Hecla entered into an Amendment to Lease with the Shivwits Band of Paiute on September 25, 1995, for the purpose of leasing and operating the Wastepile.
28. Hecla occupies the Wastepile for maintaining a tailings impoundment for permanent disposal of wastes, including, but not limited to, mined ores, wastes, contaminated soils and such other wastes as were excavated and impounded from Hecla's industrial operations on and in the immediate vicinity of the site.
29. Pursuant to the Purchase and Sale Agreement ("Agreement") entered between Hecla and Mooney Chemicals, Inc., on or about August 2, 1995, Hecla agreed to reclaim and consolidate waste materials, old liners and excavated soils from areas on-site, including but not limited to the surge pond and pond 2A, the plant, office/shop and ore storage areas into the Wastepile prior to closing. Per this Agreement, Hecla excavated all soils and waste materials above 80 parts per million for arsenic, lead and total petroleum hydrocarbons. These materials were placed untreated in the Wastepile.

30. Pursuant to the Agreement, Hecla agreed to move the waste materials contained in ponds 1A/B and 3A into the Wastepile by September 30, 1996. At the time of the Agreement, Hecla had already placed waste materials and old liners from pond 1C, 3B north and 3B south into the Wastepile.
31. Hecla currently employs one person to perform maintenance of the leachate collection trench and evaporation pond at the facility. Two corporate individuals are responsible for environmental compliance of the Wastepile.

Inspections, Investigations, Studies, Evaluations, and Analytical Information:

32. On November 16, 1998, EPA performed a compliance evaluation inspection (CEI) under RCRA and National Pollutant Discharge Elimination System (NPDES) authorities at the Wastepile. This inspection included sample collection.
33. As a follow-up to the November 16th CEIs and sampling results, EPA sent Hecla a letter dated January 15, 1999, requesting information relating to the processes conducted and wastes generated during the years of Hecla's operations; the cleanup and management of feedstock, sludges, liquids, and ponds as part of the transfer of ownership; and the pond rehabilitation, waste removal and relocation and pond refurbishment of existing ponds, and the construction and closure of the Wastepile.
34. Hecla responded to EPA's January 15, 1999 information request in a letter and attachments dated February 12, 1999.
35. Based on review of the February 12, 1999, response and results of EPA sampling conducted during the November 1998 inspection, EPA issued Hecla a formal Information Request pursuant to Section 3007 of the RCRA, 42 U.S.C. § 6927, and Section 308 of the Clean Water Act (CWA), 33 U.S.C. § 1318, on June 1, 1999.
36. EPA received Hecla's response to the formal Information Request on June 30, 1999. The truthfulness, accuracy, and completeness of this information and the information submitted in the February 12, 1999 letter and attachments was certified as accurate on June 28, 1999, by David Suhr, Idle Properties Manager, Hecla Mining Company.
37. In the Hecla response, the Respondent stated that at the time of the Hecla purchase of the St. George Mining Company (SGMC) the following amount of material was in each pond at the facility:

| Pond | Contents | Estimated Amount |
|------|---------------------------|------------------|
| 1A | not used | |
| 1B | zinc sulfate | 125 cu.yd. |
| 1C | germanium operation waste | 340 cu. yd. |

| | | |
|------------|----------------|----------------|
| 2 | leach tailings | 56,800 cu. yd. |
| 2A | leach tailings | 23,272 cu. yd. |
| 3A | iron sulfate | 1,200 cu. yd. |
| 3B north | iron sulfate | 2,800 cu. yd. |
| 3B south | iron sulfate | 2,800 cu. yd. |
| surge pond | | 180 cu. yd. |

38. Hecla sampled the SGMC wastes in the ponds listed in paragraph no. 34 above in 1988 prior to purchase of the facility from SGMC. The results of the analyses were submitted to EPA in the February 12, 1999 submittal and certified as accurate on June 28, 1999 by the Respondent. The samples were analyzed using the EP toxicity extraction to determine if the wastes were characteristically hazardous for toxicity. The Pond 1C solids exceeded the regulatory limit and exhibited the characteristics of EP toxicity for arsenic and cadmium; the Pond 2A solids exhibited the characteristic of EP Toxicity for arsenic; the Pond 3A solids exhibited the characteristic of EP Toxicity for arsenic.
39. During the November 16, 1998 inspection, Hecla representative Gary Gamble stated that Pond 1C had never been used by Hecla. Mr. Gamble also stated that Pond 2A contained SGMC tailings only and that Ponds 3B North and 3B South were not used by Hecla and contained mining materials from SGMC. According to Mr. Gamble, Ponds 1A/B and 3A were the only ponds used for new waste disposal by Hecla.
40. In July 1995, Hecla began cleanup from its operations. Wastes from the various impoundments were consolidated by Hecla into the Wastepile. An estimated 30,000 cu. yd. from Pond 1A/B, an estimated 10,000 cu yd from Pond 3A, and the volumes stated in paragraph no. 35 for Ponds 1C, 2A, and 3A and the surge pond were consolidated into the Wastepile. An unspecified amount of unmilled ore at the facility when the gallium and germanium operation was shutdown in 1990 was also placed into the Wastepile.
41. Hecla's February 12, 1999, response indicates that the acidic pond liquids remaining from the SGMC mining activities were neutralized with limestone and lime prior to relocation of the waste. Hecla did not identify which of the pond wastes were neutralized. Hecla also did not perform a waste determination on the neutralized material prior to placement in the Wastepile.
42. Hecla removed waste from Ponds 1C and 2A in 1995. Pond 1C material, germanium operation waste, had tested hazardous for arsenic and cadmium. Pond 2A materials, leach tailings, had tested hazardous for arsenic. The ponds had not been used or the waste treated since being sampled in 1988 and being excavated and consolidated into Pond 2 in 1995. Hecla placed the waste, without making a further waste determination into the Wastepile, a non-permitted, non-RCRA disposal pond.

43. During years of operation, per Attachment J, Information Request Response No. 5, submitted in response to EPA's January 15, 1999 Information Request, "Ore Sources from the Mine During the GA/GE Operations, the Apex Mine ore reserves contained 0.44 to 1.53 percentage of arsenic." In the February 12, 1999 response, the Respondent indicated that unmilled ore at the facility when the operation was shutdown in 1990 (i.e., shutdown of gallium (Ga) and germanium (Ge) production) was placed into Pond 2 (a/k/a the Wastepile) during cleanup. This material which could contain 0.44 to 1.53 percentage of arsenic (or 4400 to 15,300 ppm of arsenic) was not characterized prior to disposal in Pond 2.
44. The Wastepile is partially capped with soil from construction of ponds 3B and 3C in a dome-shaped cover. The cover is designed to control leachate collection of the wet waste materials by forcing the waste liquids out of the Wastepile into a small lined trench. The trench flows into a small lined evaporation pond adjacent to the Wastepile. There were no material specifications for compacting the pile. The liner for both the trench and evaporation pond is high-density polyethylene (HDPE).
45. During the site inspection, the evaporation pond was full and there was standing water adjacent to the pond and the collection trench. There was little to no freeboard in the pond and trench. The berms of the collection ditch and evaporation pond needed repair.
46. EPA Inspectors observed uncontrolled seepage on the northeast side of the Wastepile saturating the ground and forming crystalized deposits on the ground and rocks down gradient of the seep during the site inspection.
47. The November 1998 EPA samples were collected at five facility locations: 1) the storm water adjacent to the lined ditch, 2) the Hecla Wastepile lined ditch, 3) the Hecla evaporation basin, 4) the Hecla Wastepile crystal "seep" area on the east side of the Wastepile, and 5) storm water from the catchment basin used as a stock watering pond. The sample results showed detections of arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, tungsten, and ammonia in the releases from the Wastepile.
48. The sample results for the EPA sample collected in November 1998 for the liquid sample collected in the seep area on the east side of the pond detected arsenic being released in the seep at 5.82 ppm. Hecla sample results detected arsenic in the liquid, when analyzed for dissolved metals, at 5.9 ppm.
49. Based on the information submitted and the analytical results, the Respondent has managed hazardous waste at the facility in such a manner that releases to the environment are occurring at and from the Facility.

Effects on Human Health or the Environment:

50. Hazardous constituents detected in EPA and/or Hecla samples include arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, tungsten, and ammonia. The following are effects on human health or the environment that may be caused by the constituents detected:
- A. **Arsenic:** Arsenic is a known carcinogen, and a potential teratogenic agent. Its main path of exposure to humans is through inhalation and dermal absorption. Long term exposure can cause nerve and liver damage, narrowing of the blood vessels, and affect red blood cell production. Arsenic in the presence of acid may release a deadly gas, arsine. Arsenic has high acute toxicity to aquatic life, birds and land animals. It has a low solubility in water and is persistent in water, with a half-life of 200 days. Arsenic has high chronic toxicity to aquatic life, and is known to bioaccumulate in fish tissues.
 - B. **Cadmium:** High exposure to cadmium can cause acute health effects such as severe lung damage, fluid in the lungs, and in severe cases death. Cadmium is a probable cancer causing agent in humans, some studies link it to kidney and prostate cancer in humans, and it has been shown to cause lung and testes cancer in animals. It is a probable teratogen in humans, and may also damage the testes and affect the female reproductive cycle. Repeated low exposure can cause permanent kidney damage. Cadmium is highly persistent in water, with a half-life of greater than 200 days. Cadmium toxicity is influenced by water hardness, the harder the water the lower the toxicity. It has chronic and acute toxicity to aquatic life.
 - C. **Chromium:** Acute exposure to chromium dust can cause "metal fume fever", which causes fevers, chills, and muscle aches. Chromium is highly persistent in water and has a half-life of greater than 200 days. Hexavalent chromium is soluble and more mobile in groundwater than the trivalent chromium. Hexavalent chromium has a high acute and chronic toxicity to aquatic life.
 - D. **Cobalt:** Cobalt compounds may cause mutations in living cells, although it is not clear whether it is carcinogenic. Cobalt can damage the heart, causing heart failure. Long term exposure may damage the thyroid and liver. Repeated exposure can cause scarring of the lungs. Cobalt and its salts have high acute toxicity to aquatic life.
 - E. **Lead:** Lead is a probable teratogen in humans. The primary routes of exposure are through inhalation and ingestion. Chronic health effects include decreased fertility in male and females; kidney and brain damage. Chronic lead exposure causes nerve and behavioral effects in humans and could cause similar effects in birds and animals. Water hardness controls the toxicity of lead to aquatic life, the softer the water the greater the toxicity. It has a high chronic toxicity to aquatic life.

- F. **Mercury:** Exposure to high levels can cause pulmonary edema and death. Mercury compounds are human teratogens and may be embryotoxic. Chronic exposure can lead to kidney and damage. Acute and Chronic exposure can lead to tremors, loss of memory, hallucinations and psychosis. Mercury (II) and methyl mercury have high acute and chronic toxicity to aquatic life.
- G. **Nickel:** Nickel is a probable human carcinogen and may damage the developing fetus. High exposure through inhalation can lead to pulmonary edema and death. It can cause damage to the lungs, heart, liver and/or kidney. Nickel and its compounds have a high acute and chronic toxicity to aquatic life.
- H. **Selenium:** Selenium toxicity has been described according to three types: acute selenosis, subacute selenosis and chronic selenosis. The acute condition results in unsteady walking, labored breathing, liver congestion, degeneration of the gastrointestinal tract, gallbladder and bladder, and erosion of the long bones. Subacute selenosis results in neurological dysfunction, including impaired vision, ataxia, disorientation, and respiratory distress. In grazing livestock, it is referred to as "blind stragglers". Chronic selenosis results in skin lesions, emaciation, hoof necrosis and loss in animals. In man, chronic selenosis is characterized by fatigue, anorexia, gastroenteritis, enlarged spleen, and hepatic degeneration.
- I. **Silver:** The critical effect in humans ingesting silver is argyria, a permanent bluish-gray discoloration of the skin. Hepatic necrosis and ultrastructural changes of the liver have been induced by silver administration to vitamin E and/or selenium deficient rats.

V. CONCLUSIONS OF LAW

51. Respondent's facility is a "facility or site" within the meaning of Section 3013(a) of RCRA, 42 U.S.C. § 6934(a).
52. Respondent is a "person" as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
53. Respondent is an "owner" and "operator" of the facility within the meaning of Section 3013(a) of RCRA, 42 U.S.C. § 6934(a).
54. Section 1004(27) of RCRA, 42 U.S.C. § 6905(27) defines the term "solid waste" to mean "any garbage, refuse . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations . . ."

55. Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), defines the term "hazardous waste" to mean:

a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may-

(A) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

56. Section 1004(3) of RCRA, 42 U.S.C. § 6903(3), defines the term "disposal" to mean "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters."

VI. FINDING OF SUBSTANTIAL HAZARD

Upon the basis of the foregoing Findings of Fact, and pursuant to Section 3013(a) of RCRA, 42 U.S.C. § 6934(a), EPA makes the following determinations:

57. Hazardous wastes within the meaning of Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), are present at the facility and were treated, stored or disposed there.

58. The presence of hazardous wastes at the facility and/or the release of hazardous wastes from the facility may present a substantial hazard to human health or the environment.

59. The actions required by this Order are reasonable to ascertain the nature and extent of such hazard.

VII. ORDER

60. Based on the Findings of Fact, Conclusions of Law and Findings of Substantial Hazard as set forth above, Respondent is hereby ordered, pursuant to Section 3013 of RCRA, 42 U.S.C. § 6934, to submit three (3) copies of a written proposal to EPA within forty-five (45) days from the issuance of this Order for carrying out monitoring, testing, analysis, and reporting to ascertain the nature and extent of the hazard posed by the hazardous wastes that are present at or that may have been released from the Respondent's facility. Respondent is hereby ordered to implement such proposal once approved, or modified and approved, by

EPA. All work undertaken pursuant to this Order shall be performed in a manner consistent with EPA Region VIII's Field Sampling Guide and the QAR5, Attachments A and B to this Order, respectively. Such written proposal shall be specific and shall include, but is not limited to, the following:

A. A soil sampling and analysis work plan, including schedule and proposal for progress reports, to collect and analyze representative soil samples to determine the nature and extent of any soil contamination in and around the Wastepile, for metals, solvents and other organics, radioactive materials, and other constituents likely present in the waste material. The samples shall include near surface soils and extend to the full depth or extent of contamination. The plan shall include the number, location, depth of samples, the parameters of the analyses, and quality assurance measures.

B. A leachate and run-off sampling and analysis work plan, including schedule and proposal for progress reports, to determine the nature and extent of contaminated leachate and run-off flowing from the portions of the facility adjacent to and downstream from the Wastepile. This shall address the ditches and ponds constructed to collect Wastepile leachate and/or convey runoff away from the Wastepile, the catchment basin into which the run-off has been allowed to flow, and for all other areas onsite and offsite receiving leachate or runoff currently or historically from the Wastepile. The plan shall include the number, location, depth of samples, the parameters of the analyses, and quality assurance measures.

- 61. Each work plan above shall be designed to define the nature, location, extent, direction and rate of movement of any hazardous wastes or hazardous constituents which are present at or have been released from the facility. Each work plan shall document the procedures the Respondent shall use to conduct the investigations necessary: (1) to characterize the potential pathways of migration of hazardous waste and hazardous constituents; (2) characterize the sources of hazardous waste and/or hazardous constituent contamination; (3) define the degree and extent of hazardous waste and/or hazardous constituent contamination; and (4) identify actual or potential receptors.**
- 62. Respondent shall insure that laboratories used by Respondent for analyses perform such analyses according to the EPA methods included in "Test Methods for Evaluating Solid Waste" (SW-846) or other methods deemed satisfactory to EPA. If methods other than EPA methods are to be proposed, Respondent shall submit all protocols to be used for analysis to EPA at least thirty (30) calendar days prior to the commencement of the analyses. Respondent shall also ensure that laboratories used by Respondent for analyses participate in a quality assurance/quality control program equivalent to that which is followed by EPA.**
- 63. Based on work performed under the work plans described above, EPA may determine that additional investigation, analysis, and/or reporting is necessary to meet the purposes of this**

Order. If EPA determines that Respondent shall perform additional work, EPA will notify Respondent in writing and specify the basis for its determination that additional work is necessary. Within fifteen (15) days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with EPA to discuss the additional work. If required by EPA, Respondent shall submit for EPA approval a work plan for the additional work. EPA will specify the contents of such work plan. Such work plan shall be submitted by Respondent within thirty (30) days of receipt of EPA's determination that additional work is necessary, or according to an alternative schedule established by EPA.

64. Upon completion of the work plans required in paragraph no. 60 and any additional work required pursuant to paragraph no. 63, Respondent shall submit to EPA a final report within forty-five (45) days of work completion defining the nature, location, extent, direction and rate of movement of any hazardous wastes or hazardous constituents identified at or as having been released from the facility.
65. The written proposal and all reports or documents required to be submitted under this Order shall be mailed to the following EPA representatives:

Linda Jacobson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 500
Denver, CO 80202-2466

66. Copies of the written proposal and all reports or documents required to be submitted under this Order shall be simultaneously mailed to the following Tribal and BIA representatives:

Betsy Chin, Acting Director
Environmental Program
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, UT 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Effie Delmar, Rangeland Management Specialist
BIA Southern Paiute Field Station, Branch of Natural Resources
P.O. Box 720
St. George, UT 84771

VIII. SUBMISSIONS / AGENCY REVIEW

67. EPA will review all plans, reports, or other submittals required under this Order. EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondent to re-submit the document after incorporating EPA's comments; or (d) disapprove the submission and assume responsibility for performing all or any part of the work. As used in this Order, the terms "approval by EPA," "EPA approval," or a similar term means the action described in (a) or (b) of this paragraph.
68. Prior to approval in writing, or approval with modifications in writing, no plan, report, or other submittal shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives will not constitute approval, nor shall any oral approval or oral assurance of approval be considered as binding.
69. Upon receipt of a notice of disapproval in paragraph no. 67(c) above or a request for a modification, Respondent shall, within fifteen (15) days, or such longer time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, schedule, other item for approval. Notwithstanding the notice of disapproval, or approval with modifications, Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.
70. Within ten (10) days following EPA approval, or approval with modifications, of the a plan, Respondent shall implement the approved document.
71. All plans, reports, and/or other submittals required by this Order are, upon approval or approval with modifications by EPA, incorporated into this Order as if fully set forth in the text herein. Any noncompliance with such EPA-approved plans, reports, specifications, schedules, and attachments shall be noncompliance with this Order. Oral advice or approvals given by EPA representatives shall not relieve Respondent of its obligation to obtain any formal, written approvals required by this Order.
72. In all instances which this Order requires written submissions to EPA, each submission must be accompanied by the following certification signed by a "responsible official":

I certify that the information contained in or accompanying this submission is true, accurate, and complete.

For the purpose of this certification, a "responsible official" means person in charge of a principal facility function, or any other person who performs similar decision-making functions for the facility.

IX. PROJECT COORDINATORS

73. EPA hereby designates as its Project Coordinator:

Linda Jacobson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 500
Denver, CO 80202-2466

74. Within ten (10) calendar days of Respondent's receipt of this Order, Respondent shall designate a Project Coordinator and submit the designated Project Coordinator's name, address, and telephone number in writing to EPA.
75. Each Project Coordinator shall, on behalf of the party that designated that Project Coordinator, oversee the implementation of this Order and function as the principal project contact.
76. Respondent shall provide EPA with a written notice of any change in its Project Coordinator. Such notice shall be provided at least seven (7) calendar days prior to the change in Project Coordinator.

X. THREATS TO PUBLIC HEALTH OR THE ENVIRONMENT

77. If EPA determines that activities in compliance or noncompliance with this Order have caused or may cause a release of hazardous waste or hazardous constituents, or a threat to the public health or to the environment, EPA may require that Respondent stop further implementation of this Order for such a period of time as may be needed to abate any such release or threat and/or undertake any action which EPA determines is necessary to abate such release or threat; and may require Respondent to resume implementation of this Order.

XI. SAMPLING AND DOCUMENT AVAILABILITY

78. Respondent shall submit to EPA upon request, the results of all sampling and/or tests or other data generated by, or on behalf of, the Respondent in implementing the requirements of this Order.

XII. ACCESS

79. Respondent shall provide access at all reasonable times to the facility and to all records and documentation relating to conditions at the facility and the activities conducted pursuant to this Order to EPA and its employees, contractors, agents, consultants, and representatives. These individuals shall be permitted to move freely at the facility in order to conduct activities which EPA determines to be necessary.
80. To the extent that activities required by this Order, or by any approved work plans prepared pursuant hereto, must be done on property not owned or controlled by Respondent, Respondent will use its best efforts to obtain site access agreements in a timely manner from the present owners of such property. Best efforts as use in this paragraph shall include the payment of reasonable compensation in consideration of granting access. Respondent shall ensure that EPA's Project Coordinator has a copy of any access agreements.
81. Nothing in this Order limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including RCRA and the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA").
82. Respondent shall notify the EPA, Tribal and BIA representatives identified in paragraph nos. 65 and 66 in writing at least ten (10) calendar days before engaging in any field activities at the facility, including but not limited to sampling, remediation, well-drilling, and installation of equipment. Respondent shall allow EPA, Tribal or BIA representatives to be on-site at the time of any field activities.
83. At the request of EPA, Respondent shall provide or allow EPA or its authorized representatives to take split and/or duplicate samples of all samples collected by Respondent pursuant to this Order.

XIII. RECORD PRESERVATION

84. Respondent shall retain, during the pendency of this Order and for a minimum of five (5) years after its termination, a copy of all data, records, and documents now in its possession or control, or in the possession of control of its contractors, subcontractors, representatives, or which come into the possession of control of the Respondent, its contractors, subcontractors, or representatives, which relate in any way to this Order. Respondent shall notify EPA, in writing, at least ninety (90) days in advance of the destruction of any such records, and shall provide EPA with the opportunity to take possession of any such records. Such written notification shall reference the caption, docket number and date of issuance of this Order and shall be addressed to:

Sharon Kercher, Director
Technical Enforcement Program
U.S. EPA Region 8, 8ENF-T
999 18th Street, Suite 500
Denver, CO 80202-2466

In addition, Respondent shall provide data, records and documents retained under this Section at any time before the expiration of the five year period at the written request of EPA.

XIV. INFORMATION SUBMITTED TO EPA

85. Any information that Respondent is required to provide or maintain pursuant to this Order is not subject to the Paperwork Reduction Act of 1995, 44 U.S.C. § 3501 et seq.
86. Respondent may assert a business confidentiality claim in the manner described in 40 CFR § 2.203(b) covering all or part of any information submitted to EPA pursuant to this Order. Any assertion of confidentiality shall be adequately substantiated by Respondent when the assertion is made in accordance with 40 CFR § 2.204(e)(4). Information submitted for which Respondent has asserted a claim of confidentiality as specified above shall be disclosed by EPA only to the extent and manner permitted by 40 CFR Part 2, Subpart B. If no such confidentiality claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Respondent.

XV. RESERVATION OF RIGHTS

87. EPA expressly reserves all rights and defenses that it may have, including the right to disapprove of work performed by Respondent pursuant to this Order.
88. EPA expressly reserves all statutory and regulatory powers, authorities, rights, remedies, both legal and equitable, including any which may pertain to Respondent's failure to comply with any of the requirements of this Order, specifically including, without limitation, the right to commence a civil action against Respondent seeking an order requiring compliance with this Order and/or the assessment of penalties under Section 3013(e) of RCRA, 42 U.S.C. § 6934(e), and all rights EPA has pursuant to RCRA § 3013(d), 42 U.S.C. § 6934(d) to conduct monitoring, testing, analysis at the facility and to seek reimbursement from Respondent for the costs of such activity. This Order shall not be construed as a covenant not to sue, or as a release, waiver or limitation of any rights, remedies, defenses, powers and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), the Clean Air Act (CAA), or any other statutory, regulatory, or common law enforcement authority of the United States.

89. **EPA expressly reserves all rights and defenses that it may have, including the right both to disapprove of work performed by Respondent pursuant to this Order, and to order that Respondent perform additional tasks.**

XVI. OTHER APPLICABLE LAWS

90. **All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable federal, state, and local laws, regulations, permits, and ordinances.**
91. **Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA, or any other applicable federal, state, or local laws, regulations, permits, and ordinances.**
92. **This Order is not and shall not be interpreted to be a permit, or as a ruling or a determination of any issue related to a permit under federal, state or local law. This Order shall not in any way affect Respondent's obligation, if any, to secure such a permit, nor shall this Order be interpreted in any way to affect or waive any of the conditions or requirements that may be imposed as conditions of such permit or of Respondent's right to appeal any conditions of such permit. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.**

XVII. OTHER CLAIMS

93. **Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous waste constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or migrating from the facility.**
94. **By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts of omissions of Respondent or its agents, contractors, subcontractors or other representatives.**
95. **Neither the United States nor EPA shall be a party or be held out as a party to any contact entered into by the Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out activities pursuant to this Order.**

XVIII. SUBSEQUENT MODIFICATION OF ORDER

96. Except as provided in paragraph no. 97, this Order may only be modified by written amendment signed by the undersigned EPA Region VIII Technical and Legal Enforcement Supervisors.
97. Modifications in any schedule adopted pursuant to this Order may be made in writing by EPA.
98. No informal advice, guidance, suggestions, or comments by EPA shall be construed to modify the requirements of this Order. Routine communications exchanged verbally, in person, by telephone or by electronic mail, between the parties to facilitate the orderly conduct of work contemplated by this Order shall not alter or waive any rights and/or obligations of the parties under this Order.

XIX. STATEMENT OF SEVERABILITY

99. If any provision or authority of this Order, or the application of this Order to any party or circumstances, is held by any judicial or administrative authority to be invalid, the application of such provisions to other Parties or circumstances and the remainder of the Order shall not be affected thereby.

XX. TERMINATION AND SATISFACTION

100. Respondent may seek termination of this Order by submitting to EPA a written document which indicates Respondent's compliance with all requirements of this Order, and the associated dates of approval correspondence from EPA. The provisions of this Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement for Record Preservation and Reservation of Rights" (Acknowledgment). The Acknowledgment shall specify that Respondent has demonstrated to the satisfaction of EPA that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed.
101. The provisions of this Order shall be deemed satisfied upon Respondent's receipt of written notice from EPA that Respondent has demonstrated to the satisfaction of EPA that the terms of the Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. This notice shall not, however, terminate Respondent's obligations to comply with any continuing obligations hereunder, including without limitation, Section XIII (Record Preservation) and Section XVI (Other Applicable Laws).

XXI. OPPORTUNITY TO CONFER

102. In accordance with Section 3013(c) of RCRA, 42 U.S.C. § 6934(c), Respondent or its representative may confer in person or by telephone with EPA regarding this Order. The opportunity to confer with EPA may be pursued by the Respondent either before or after the proposal is due, but not later than sixty (60) days after the issuance of this Order. At such conference, Respondent may discuss the following with EPA: the Order, its applicability to the Respondent, the correctness of any factual determinations upon which the Order is based, the appropriateness of any action which Respondent is hereby ordered to undertake, and any other relevant and material issue.
103. The scheduling of a conference with EPA does not relieve Respondent of the obligation to submit the written proposal required under Section VII of this Order within forty-five (45) days of the date of issuance of this Order, or to implement the proposal once approved, or approved with modifications, by EPA.
104. At the conference described above, Respondent may appear in person and/or by attorney or other representative. Additionally, Respondent may submit written comments to the EPA Project Coordinator addressing issues that could be raised in the conference within the time frames set for conducting such conference.
105. Any request for a conference with EPA, and other questions regarding this Order should be directed to:

Amy Swanson, Enforcement Attorney
U.S. Environmental Protection Agency
Region 8, 8ENF-L
Denver, CO 80202-2466
Phone: (303) 312-6906

If Respondent fails to request a conference within the time periods provided in this Section, or fails to agree upon a date to schedule such conference within the time periods provided in this section, Respondent shall be deemed to have waived its right under Section 3013 of RCRA to confer with EPA regarding this Order.

XXII. POTENTIAL CONSEQUENCES OF FAILURE TO COMPLY

106. In the event Respondent fails or refuses to comply with the terms and provisions of this Order, EPA may commence a civil action in accordance with Section 3013(e) of RCRA, 42 U.S.C. § 6934(e), to require compliance with such Order and to assess a civil penalty (consistent with 40 CFR Part 19) not to exceed \$5,500 for each day during which such failure or refusal occurs.

107. If EPA determines that Respondent is not able to conduct the activities required by this Order in a satisfactory manner, or if actions carried out are deemed unsatisfactory, then EPA or its representatives may conduct such actions deemed reasonable by EPA to ascertain the nature and extent of the hazard at the property and/or facility of Respondent. Respondent may then be ordered to reimburse EPA or its representatives for the costs of such activity pursuant to Section 3013(d) of RCRA, 42 U.S.C. § 6934(d).

XXIII. EFFECTIVE DATE

108. This Order is effective upon receipt by the Respondent.

IN THE MATTER OF HECLA MINING COMPANY
6500 Mineral Drive
Coeur d'Alene, Idaho

IT IS SO ORDERED BY U.S. EPA, REGION VIII

By: Sharon J Kercher
Sharon Kercher, Director
Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice
U.S. Environmental Protection Agency Region VIII

9/22/99

Date

By: David J Janik
Michael T. Risner, Director
David J. Janik, Senior Supervising Attorney
Legal Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice
U.S. Environmental Protection Agency Region VIII

9/21/99

Date

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United States
Environmental Protection
Agency

Office of Research and
Development
Washington, D.C. 20460

EPA/600/R-98/018
February 1998

EPA GUIDANCE FOR QUALITY ASSURANCE PROJECT PLANS

EPA QA/G-5

(1st Page Only)

2.2.2 Mandatory Use of QA/R-5 and QAPPs

All environmental data collection activities conducted by or on behalf of EPA Region 8 must be addressed in a QAPP. QAPPs must be developed per Agency requirements as specified in EPA QA/R-5, *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations*. Region 8 requires that 16 elements defined in QA/R-5 be addressed adequately before a QAPP may be approved. These elements are:

Project Management

- A1 Title & Approval Sheet**
- A2 Table of Contents**
- A4 Project/Task Organization**
- A5 Problem Definition/Background**
- A6 Project/Task Description**
- A7 Data Quality Objectives for Measurement Data**

Measurement/Data Acquisition

- B1 Sampling Process Design**
- B2 Sampling Methods Requirements**
- B3 Sample Handling & Custody Requirements**
- B4 Analytical Methods Requirements**
- B5 Quality Control Requirements**
- B7 Instrument Calibration & Frequency**

Assessment/Oversight

- C1 Assessments and Response Actions**

Data Validation & Usability

- D1 Data Review, Validation & Verification Requirements**
- D2 Validation & Verification Methods**
- D3 Reconciliation with Data Quality Objectives**

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**EPA REQUIREMENTS
FOR
QUALITY ASSURANCE PROJECT PLANS
FOR ENVIRONMENTAL DATA OPERATIONS**

EPA QA/R-5

**United States Environmental Protection Agency
Quality Assurance Division**

Washington, DC 20460

EXTERNAL REVIEW DRAFT FINAL

OCTOBER 1998

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United States
Environmental Protection
Agency

Office of Wetlands,
Oceans and Watersheds
4503F

EPA 841-B-96-003
September 1996



The Volunteer Monitor's Guide To

Quality Assurance Project Plans



(1st Page Only)

**U.S. EPA REGION VIII
MINIMUM REQUIREMENTS
FOR
FIELD SAMPLING ACTIVITIES**



September 1996

**This replaces the document "U.S. EPA Region VIII Standard
Operating Procedures for Field Sampling Activities, Version 2"
dated June 1994.**

**U.S. Environmental Protection Agency
Technical and Management Services
Denver, Colorado**

(1st Page Only)